

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (previously presented) A method for increasing bone mass at least 10% in a host without a loss in bone strength or quality comprising administering an effective amount of a compound that (i) binds to the estrogen α or β receptor (or the equivalent receptor in the host animal) with an association constant of at least 10⁸ M⁻¹; (ii) (a) induces estrogenic gene transcriptional activity at a level that is no greater than 10% that of 17β-estradiol when administered in vivo at concentrations of 10⁻¹¹ to 10⁻⁷ M a dosage of at least 0.1 ng/kg body weight or in vitro in osteoblastic or osteocyctic cells with natural estrogen receptors or cells transfected with estrogen receptors or (b) induces an increase in uterine weight of no more than 10% that of 17β-estradiol (or the equivalent compound in a host animal); (iii) induces the phosphorylation of extracellular signal regulated kinase (ERK) when administered in vivo at a dosage of at least 0.1 ng/kg body weight or in vitro at concentrations of 10⁻¹¹ to 10⁻⁷ M in osteoblastic cells with natural estrogen receptors or cells transfected with estrogen receptors; and (iv) has an anti-apoptotic effect on osteoblasts at an in vitro dosage of at least 0.1 ng/kg body weight in vitro in osteoblastic or osteocytic cells with natural estrogen receptors or cells transfected with estrogen receptors.

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Claim 2. (currently amended) The method of claim 1, wherein the compound is not an estrogen compound that induces estrous and does not induce significant androgenic gene transcriptional activity.

Claims 3-8. (withdrawn)

Claim 9. (original) The method of claim 1, wherein the compound also has a pro-apoptotic effect on osteoclasts at an *in vivo* dosage of at least 0.1 ng/kg body weight, or in osteoclastic cells with natural estrogen receptors or cells transfected with estrogen receptors.

Claims 10-29. (withdrawn)

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Claim 30. (currently amended) The method of claim <u>42</u>, further comprising administering the compound in combination with a second pharmaceutical agent.

Claim 31. (previously presented) The method of claim 30, wherein the second pharmaceutical agent is bone anti-resorption agent.

Claim 32. (previously presented) The method of claim 30, wherein the second pharmaceutical agent is a bone mass anabolizing agent.

Claim 33. (previously presented) The method of claim 30, wherein the second pharmaceutical agent is an antioxidant.

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Claim 34. (previously presented) The method of claim 30, wherein the second

pharmaceutical agent is a dietary supplement.

Claim 35. (previously presented) The method of claim 30, wherein the second

pharmaceutical agent increases the beneficial effect of the active compound on bone structure,

strength or mass.

Claim 36. (previously presented) The method of claim 30, wherein the second

pharmaceutical agent is selected from the group consisting of an anabolic steroid, a

bisophosphonate, a calcitonin, an estrogen or progestogen, an anti-estrogens such as raloxifene

or tamoxifene, parathyroid hormone, fluoride, Vitamin D or a derivative thereof, or a calcium

preparation.

Claim 37. (previously presented) The method of claim 30, wherein the second

pharmaceutical agent is selected from the group consisting of alendronic acid, disodium

clondronate, disodium etidronate, disodium pamidronate, neridronic acid, risedronic acid,

teriparatide acetate, tiludronic acid, ipriflavone, potassium bicarbonate, progestogen, a thiazide,

gallium nitrate, NSAIDS, plicamycin, aluminum hydroxide, calcium acetate, calcium carbonate,

calcium magnesium carbonate, and sucralfate.

Claims 38-45. (withdrawn)

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Claim 46. (new) The method of claim 1, wherein the compound is selected from the group consisting of estratriene-3-ol, 17alpha-estradiol, and 17beta-estradiol linked to bovine serum albumin.

Claim 47. (new) The method of claim 1, wherein the compound is estratriene-3-ol.